

to form a conjugate of the first type of thyroglobulin with the specific lectin or the specific antibody; then

- (ii) adding to the first portion an antibody-2, capable of binding to the two types of thyroglobulin but not capable of binding to the thyroglobulin to which the specific lectin or the specific antibody is already bound, to form a conjugate of the second type of thyroglobulin with the antibody-2; and
- (iii) measuring the amount of the second type of thyroglobulin on the basis of the measurement of the second type of thyroglobulin with antibody-2 conjugate formed in step (b)(ii); and

(c)(i) measuring an amount of the total thyroglobulin of the second portion; and

- (ii) determining an amount of the first type of thyroglobulin from the difference between an amount of the total thyroglobulin and the amount of the second type of thyroglobulin obtained in step (b)(iii);

(d) calculating a ratio of (a) the amount of the first type of thyroglobulin to the amount of total thyroglobulin; or (b) the amount of second type of thyroglobulin to the amount of total thyroglobulin; and

(e) determining the malignancy of a thyroid tumor by comparing the calculated ratio with a corresponding predetermined ratio from a reference fluid sample originating from a living body having a normal thyroid or a benign thyroid;

wherein the sample is determined to be malignant when the calculated ratio is significantly higher or lower than that of the reference fluid sample of the normal or benign thyroid.